

□ **Decrease of digested sludge at sewage plants by direct ozonization at activated sludge processes**

L20 ANSWER 29 OF 121 HCA COPYRIGHT 2002 ACS

AN 134:197564 HCA

IN Leitzke, Ortwin; Bidinger, Stefan; Dzedzig, Bernd; Geiger, Markus; Heckmann, Frank; Hoelter, Heinrich; Hofer, Uwe; Linnhoff, Michael; Rauch, Bernd

PA Philaqua Aufbereitungstechnik G.m.b.H., Germany

SO Ger. Offen., 6 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19920269	A1	20010308	DE 1999-19920269	19990503

AB The **decrease** of digested **sludge** at sewage plants is carried out by direct ozonization, whereby ozone is fed together with the oxygen or **air flow** to the activated sludge process. The ozone is appointed with 5-50 g ozone per 1 kg org. dry substance from activated sludge and per diem. The ozone is supplied directly into the activated sludge tank by ozone-resistant devices like teflon **membranes**, gas-priming submerged pumps, or rotary pumps, which are circulating simultaneously the sludge and the wastewater flow at the nitrification tank, after passing through the denitrification tank. Optionally, the ozone supply is carried out via a side flow, that bears a liq. and sludge flow to sewage flow ratio of 1:1 up to 1:3. The aeration and the ozonization leads to a balance between growing and destroying of microorganism in the activated sludge. Ozone is absorbed immediately by the liq. and reacts with the sludge flocs by attacking the cell walls of the microorganisms, and destroying them. Afterwards a chem. phosphate pptn. is conducted.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT